What is claimed is:

[Claim 1] Claim 1 is apparatus for measuring the size and the height of the bubble. The Apparatus consist of vertical holder for test tube, test tube for placing the cutting sample and pipette for adding measurable quantity of liquid. (Note: "vertical holder for test tube and test tube" are disclosed in US application 10/711435 Horizontal Binocular Microscope for vertically gravitated and floating samples).

[Claim 2] Claim 2 is process of measuring the size and the height of the bubbles. The pore size is measured by the grain size of fraction in the test tube. As the sample is very fine grinded (by mortal and pistil) the size may be measured by sieving it and then taking the statistic average of the mass weight versus the sieve size. By applying the above method using 2-3 different sizes as necessary the high accuracy will be achieved.

[Claim 3] Claim 3 is the algorithm of calculation of the Gas Emission Quantity and Gas Pore Pressure. This initial volume of gas in pore and the final volume in test tube are related by $v1/p1=v2/p2$. If the size of grinded cuttings is the same (by mean) then the higher-pressure gas will create the bigger size bubbles. By repeating the test and adding/subtracting more liquid to the sample and increasing/decreasing the height and the pressure of the liquid on the pore the test is repeated and the measurements documented in the tables for math processing to obtain the error corrections and standard deviation of the measurements. The results are expressed in Emission=V/P=mm3/Pa, Total Volume=V=mm3, Maximum Pressure=P=Pa.